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ORIENTAL SORE IN PALESTINE, WITH A REPORT OF A NEW ENDEMIC FOCUS.

BY

I. J. KLIGLER, M.A., PH.D., B.Sc.,

Controller, Malaria Research Unit, Department of Health, Palestine.

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Palestine is known as one of the countries where oriental sore is endemic. The local form of cutaneous leishmaniasis is called Jericho boil, because the infection was believed to be localized in that city. In the past two years we have had occasion to see a number of patients, who have contracted their infection in the vicinity but outside the limits of the city of Jericho, and recently we have studied three cases who have apparently acquired the disease in Kantara, on the southern border of Palestine.

The object of the present note is to describe briefly the cases of oriental sore from Kantara, and compare their lesions with those of Jericho boil studied in this laboratory.

ORIENTAL SORE IN KANTARA.

History of Cases.—Towards the end of the year 1922, the personnel of the railway stores was transferred from Kantara to Haifa. During the latter part of January two adults and an infant were sent to the laboratory with sores suggestive of leishmaniasis. Examinations of scrapings from the sores revealed the presence of typical leishman bodies. The following is a brief description of the cases.

Case 1.—Abdul Malik, 25 years old, works in the railroad stores and was stationed in Kantara. During the last year he left Kantara only once, when he went to Cairo. He was transferred to Haifa two months prior to examination. One month after his arrival in Haifa, three sores developed, two on the finger joints and one on the right cheek, over the cheek bone.

On 17th January, he came to the laboratory. He related that he had already received five emetin injections from the Medical Officer of the railroad. The sores on the finger joints were healed, but the one on the cheek was still active.

The picture of the sore was quite typical. It was elevated, glossy, the base red, the top covered by a dry crust and the area around the sore indurated. There was no pain or sensitiveness. Smears were made from the granulation tissue and stained with Giemsa. On examination, typical leishman bodies were found, enclosed in large mononuclear cells.

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Case 2.—Kamil Massif, 27, also an employee in the railroad stores. He was stationed in Kantara until a month prior to the examination, when he was transferred to Haifa. During the three years that he was in Kantara he left only once; one month prior to his transfer he went to Safin-El-Kun, near Tanta, Egypt.

Ten days before his examination in the laboratory, or about three weeks after his arrival in Haifa, he developed a sore on the right cheek over the cheek bone.

The patient came to the laboratory 22nd January. He had received no treatment. The sore was typical and still fresh and active. The smear revealed large numbers of large mononuclears with leishman bodies, as well as occasional free forms.

Case 3.—Zizif Golas, 5 months old. The father is an employee in the railroad stores and was stationed in Kantara. The mother went to Cairo to be delivered, and about a week after delivery returned to Kantara. The father had no sores. The mother had a number of non-characteristic sores on her face and body, and on examination no leishmania were found.

The family came to Haifa two months prior to the examination and about one month after the arrival the child developed a sore in the inner corner under the left eye.

The child was brought to the laboratory on 28th January. Smears were made and typical leishman bodies were found profusely distributed throughout the smear.

The histories of these cases indicate that the infection was contracted in Kantara. Although all the patients had been away from Kantara for short visits to Egypt, the fact that they visited different cities not known to be centres of infection renders it unlikely they had received their infection in Egypt. Another important consideration is the fact that the sores developed only after the patients had been in Haifa for some time. This corresponds with the experience with Jericho boil, which usually develops some time after the patient has left the endemic area.

It is quite likely that other instances of infections at Kantara have been noted before. No literature being available, Dr. STUART has kindly communicated with Dr. RICHARDS, in Egypt. In reply he writes: "I know that during the war, and after it, there was quite a number of cases of *Leishmania tropica* among the British troops, particularly at Kantara." If that was the case, there is little doubt that Kantara is an endemic centre of oriental sore.

CHARACTER AND DISTRIBUTION OF BOILS.

The sores were always found on the exposed parts of the body. All of the patients, from Jericho as well as from Kantara, had sores on some parts of the face. The face is apparently the place of choice for these.

On comparing the sores from the two sources, certain differences were noted. The Jericho sores were multiple in character. Four of the five cases seen had one or more sores on some exposed part of the body (hand or feet) in addition to the one on the face. The Kantara sores were, on the other hand, unitary; only one patient had more than one sore. The Jericho sores were

nodular and discrete and the surface smooth and glossy. The Kantara sores were flat, spreading, and the tops covered with a dry crust.

The most striking difference between the sores from the two sources, was noted in the number of parasites. In the Jericho sores the leishman bodies were few in number, difficult to find, almost invariably intracellular. In the Kantara sores, on the other hand, the parasites were abundant, and both extra and intracellular forms were found with ease in considerable numbers. In the smear from the infant, the free parasites were so numerous that it looked like a generalised infection.

It is difficult to fix the incubation period, but from the cases observed it is possible to fix maximum and minimum limits. The patients who contracted the infection in Jericho were there during the months of July to September, and began to come for treatment in November. The maximum period between the visit to Jericho and the appearance of lesions was four months. In one instance, the lesion appeared two months after the arrival and one month after leaving Jericho, giving a maximum and minimum incubation of two months and one month respectively.

The only one of the Kantara cases in which the incubation limit can be defined, is the infant. In this case it was two months.

As far as could be determined there were no noticeable differences in the parasites. Cultures were easily obtained in the media described in a previous publication, but infection of lower animals was not successful.

Summary.

There are apparently two endemic foci of oriental sore in Palestine. One is Jericho and its vicinity down to the Dead Sea, the other is Kantara. There are certain differences in the character of the boils derived from the two localities. The Kantara boil bears a closer resemblance to Aleppo or Delhi boil than to that of Jericho. The parasites found in the boils from these two localities are identical, so far as one can judge from cultural and morphological characteristics.

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